

**Moore County Water Pollution Control Plant
Wastewater Annual Performance Report
Fiscal Year July 2014- June 2015**

General Information

Facilities Names: Moore County Water Pollution Control Plant
 Moore County Interceptor & Collection System

Permits Issued to Moore County: Water Pollution Control Plant NC0037508
 Pinehurst WQCS00034

Contact Persons: Randy Gould, PE, Public Works Director (910) 947-6315
 Andrew McNeill, Wastewater Collection ORC (910) 947-6315
 Janna Scherer Nall, Wastewater Plant ORC (910) 281-3146

Treatment Plant & Collection System Description:

The Moore County Water Pollution Control Plant (WPCP) is located at 1094 Addor Road in Aberdeen, North Carolina and operates under Permit No. NC0037508. The facility is currently permitted to treat 6.7 million gallons per day (MGD). The construction of the upgrade to 10 MGD is complete; the permit will be increased once the project is closed out. Flow entering the plant passes through 1 of 2 bar screens to the raw sewage influent pumps that transport the wastewater up to the grit removal units. Treatment is accomplished by splitting the flow between 3 trains, each consisting of a primary clarifier, 1st stage aeration basins, intermediate clarifier, 2nd stage aeration basins and a final clarifier. All flow then passes through sand filtration followed by UV disinfection. The treatment plant uses a biological treatment process to remove pollutants in the wastewater that can potentially be harmful to the environment and to the receiving stream. The facility uses anaerobic digestion to treat the sludge removed from the wastewater treatment process. The method used to dry sludge is belt filter press; the dried sludge is hauled to a landfill. These processes are maintained by operators certified by the State of North Carolina and are inspected yearly by the North Carolina Division of Environment and Natural Resources (NCDENR). Reports are submitted monthly to NCDENR that contain all the results of testing done on the incoming raw wastewater and treated water discharged from the plant.

The treated water is discharged from the facility into Aberdeen Creek in the Lumber River Basin. The wastewater enters the facility from an interceptor sewer, a collection system that is made up of approximately 15 miles of gravity sewer lines that is capable of handling 32 MGD. This interceptor system receives wastewater from the collection systems of the following municipalities: Aberdeen, Carthage, Pinebluff, Pinehurst, Southern Pines and Vass. The WPCP facility also receives flow from Camp MacKall force main that discharges directly into the WPCP raw sewage pump station. As part of

this interceptor system, there are 19 flow monitoring stations that record flow information for bulk billing purposes to the municipalities.

Moore County is also responsible for the Pinehurst Collection system. All together the interceptor and Pinehurst collection system consist of 28 miles of force mains, 207 miles of gravity lines, and 43 pumping stations.

Performance:

July 2014

No overflows or permit violations to report

August 2014

No overflows or permit violations to report

September 2014

No overflows or permit violations to report

October 2014

No overflows or permit violations to report

November 2014

November 16, 2014 Moore County Public Works had a wastewater spill of approximately 36,750 gallons at LS 10-3 Force main near 255 Beulah Hill Road located in Pinehurst, NC. The untreated wastewater did not reach surface water. The discharge was due to pipe failure. The discharge was first discovered November 16, 2014 and continued for approximately 12 hours while repairs were made. The Division of Water Quality was notified November 17, 2014 at 8:15 am.

December 2014

December 12, 2014 Moore County Public Works had a wastewater spill of approximately 2,250 gallons off Stoneykirk Drive – Pinewild Country Club in Pinehurst, NC. The untreated wastewater entered a tributary to Joe Fork Creek. The discharge was due to roots in the line. The discharge was first discovered December 12, 2014 and continued for approximately 1 hour while repairs were made. The Division of Water Quality was notified December 12, 2014 at 4:35 pm.

January 2015

January 6, 2015 Moore County Public Works had a discharge of untreated wastewater from a force main in our wastewater collection system located at 285 Sugar Gum Lane in Pinehurst, NC of approximately 16,170 gallons. The discharge lasted for approximately 9 hours. The untreated wastewater entered into Pinehurst Lake a tributary to Horse Creek. The discharge was due to pipe failure. The force main was repaired and placed back into service by replacing 24' section of pipe to prevent further discharge. The Division of Water Resources was notified of the event on January 7, 2015 at 10:45 am.

January 14, 2015 Moore County Public Works had a discharge of untreated wastewater from a pump station (LS 3-4) in our wastewater collection system located at 2188 Longleaf Drive West in Pinehurst, NC of approximately 2,500 gallons. The discharge lasted for approximately 1 hour while repairs were made. The untreated wastewater did not enter surface water. The discharge was due to pump station equipment failure. The Division of Water Resources was notified of the event on January 15, 2015 at 10:10 am.

January 31, 2015 Moore County Public Works had a discharge of untreated wastewater at 270 Lake Hills Road, Pinehurst, NC of approximately 575 gallons. The discharge lasted approximately 2 hours. The untreated wastewater was discharged into Pinehurst Lake a tributary of Horse Creek. The main was jetted to prevent further discharge. The Division of Water Resources was notified of the event on February 1, 2015 at 10:37 am.

February 2015

February 26, 2015 Moore County Public Works had a discharge of untreated wastewater of approximately 600 gallons at 960 Burning Tree Road in Pinehurst, NC. The discharge lasted approximately 1 hour while repairs were made. The untreated wastewater entered an unknown tributary to Pinehurst Lake. The discharge was due to roots in the line. The Division of Water Resources was notified of the event on February 27, 2015 at 8:40 am.

March 2015

March 22, 2015 Moore County Public Works had a discharge of untreated wastewater of approximately 1,050 gallons at 1050 Burning Tree Road in Pinehurst, NC. The discharge lasted approximately 2 hours while repairs were made. The untreated wastewater entered Pinehurst Lake a tributary to Horse Creek. The discharge was due to roots in the line. The Division of Water Resources was notified of the event on March 23, 2015 at 7:45 am.

April 2015

No overflows or permit violations to report

May 2015

May 12, 2015 Moore County Public Works had a discharge of untreated wastewater of approximately 100 gallons at Lift Station PW-9, 51 Kilbride Drive in Pinehurst, NC. The discharge lasted for approximately 1 hour while repairs were made. The untreated wastewater entered Deep Creek. The discharge was due to pipe failure. The Division of Water Resources was notified of the event on May 12, 2015 at 2:57 pm.

May 26, 2015 Moore County Public Works had a discharge of untreated wastewater of approximately 125 gallons at 1735 Longleaf Drive East in Pinehurst, NC. The discharge lasted for approximately 1 hour while repairs were made. The untreated wastewater entered Joe Fork Creek. The discharge was due to debris in the line. The Division of Water Resources was notified of the event May 26, 2015 at 4:20 pm.

June 2015

No overflows or permit violations to report

Improvements to the System:

- **Wireless monitoring system:**
The installation of flow monitoring equipment at lift stations, and flow monitoring stations has begun. When completed the wireless based cellular communication system will monitor the flow from 28 pump stations and 17 flow monitoring stations.
- **Lift Station 3-4:**
Replacement of 2,200 Gallon per Minute (GPM) Wastewater Lift Station
- **Interceptor Sewer Repair:**
Sewer relocation and upgrade along NC Highway 211 as part of the NCDOT NC 211 widening project.
- **Purchase of Centaur All-Terrain Vehicle:**
Purchased for inspection of hard- to- access Rights-of-Way
- **Purchase of KWMI Easement Machine:**
Purchased to help clean sewer lines that cannot be reached with Vacuum Truck
- **LS HF-1:**

Installed new electrical panel - plans to upgrade wet well in coming months

- **LS B-1:**
Installed new electrical panel and pumps with SS guide rails
- **LS 17-3:**
Installed new electrical panel with rain hood and installed new pumps and guide rails
- **LS 3-3:**
New Pumping Chamber installed
- **LS V-2:**
Installed new pumps, guide rails, base elbow, electrical panel and installed Bypass
- **LS 10-3:**
Replaced all pump guide rails and raised pumps off of the floor 3 inches to fix cavitation problems
- **LS 13-2:**
Installed new ARV on force main
- **LS 3-1:**
Installed two new ARV's on force main
- **MR-1:**
Elimination

Improvements to the Water Pollution Control Plant:

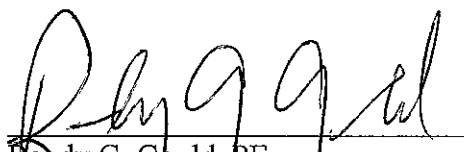
- **Rehab of Influent Pump Station:**
Installed new grating, exhaust fans and lighting in the wet well of raw sewage. Two influent pumps were rebuilt.
- **Rehab of Primary Clarifier Valves:**
Valves on Primary Clarifiers 1 and 2 were replaced.

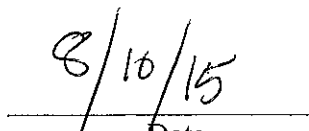
Notification:


The availability of this report will be advertised in the local papers circulated in the Moore County area, and a Public Notice will be placed at the Moore County Public Works Building. This notice will inform all users and/or customers of the Moore County Water Pollution Control Plant that a report on the performance of this facility is available for their review. A copy of the report will be posted on the Moore County website or may be picked up at the Moore County Department of Public Works located at 5227 Highway 15-501 in Carthage, North Carolina. If you wish to receive a copy by mail please call (910) 947-6315.

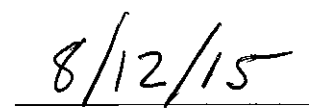
Certification:

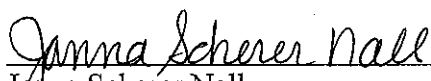
I certify under penalty of law this report is complete and accurate to the best of knowledge. I further certify this report will be made available to all users and/or customers of the Moore County Water Pollution Control Plant upon their request and advertised as noted above.

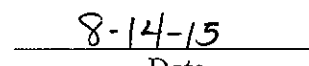

Randy G. Gould, PE
Public Works Director


Date


Andrew McNeill
Wastewater Collection ORC


Date


Janna Scherer Nall
Wastewater Plant ORC


Date